

Remarks

This is provided in response to the final Office Action (Paper No. 37) mailed July 20, 2004 and accompanies a third request for continued examination (RCE) filed for this case.

The Applicant has cancelled previously pending claims 8-10, 15-17 and 36-51 without prejudice and has presented new claims 52-71 above. These new claims remain directed to the elected species A from the election requirement of November 22, 1999, and independent claims 52, 58 and 63 are generic claims. 37 CFR 1.141, MPEP 809.02(a).

These new claims are proper, do not introduce new matter, and serve to place the application in proper condition for reconsideration and allowance.

Rejection of Claims Under 35 U.S.C. §112

The final Office Action rejected claims 44, 45 and 50 under 35 U.S.C. §112, second paragraph for being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. Claims 36-51 were further rejected under 35 U.S.C. §112, first paragraph for failing the written description requirement.

The Applicant respectfully traverses these rejections on the basis that claims 44, 45 and 50 were sufficiently definite to meet the requirements of §112, second paragraph and claims 36-51 were supported by the specification as originally filed pursuant to §112, first paragraph. Nevertheless, the Applicant has elected to cancel these claims and present new claims 52-71 as discussed below, and it is believed that this action obviates the foregoing rejections.

Rejection of Claims 36-51 Under 35 U.S.C. §103(a)

The final Office Action further rejected claims 36-51 under 35 U.S.C. §103(a) as being obvious over Published Japanese Patent Application No. JP 4-205776A to Takatsuka (hereinafter “Takatsuka”). This rejection is respectfully traversed on the basis that Takatsuka failed to teach or suggest the subject matter recited in these claims. Nevertheless, as indicated above these claims have been cancelled without prejudice, and such cancellation obviates the rejection.

Patentability of New Claims 52-71

Pursuant to 37 CFR 1.111, the Applicant submits that new claims 52-71 meet the requirements of 35 U.S.C. §112 and are patentably distinct over the art of record.

Independent claim 52 is generally directed to a base deck for a 3.5 in form factor data storage device, the base deck comprising a *base surface* configured to support a single spindle motor configured to rotate at least one data storage disc at a nominal operational speed about a disc axis, a *disc shroud surface* which extends from the base surface substantially parallel with the disc axis and adjacent an outermost perimeter of the at least one data storage disc, and a *lip surface* which extends from the shroud surface to an outermost edge of the base deck. These features are exemplified, without being limited, by the disclosed base deck 102 with base spindle support surface (not numerically designated – see FIG. 4), disc axis 108 (see FIG. 3), disc shroud surface 116 (see FIGS. 3 and 4) and lip surface 115 (best viewed in FIG. 3).

Further, new claim 52 generally recites the lip surface as configured to compressingly engage a gasket seal to form a sealed interior environment, and wherein the lip surface has a minimum extent of at least about 7.6 millimeters along a line extending from the disc axis to the outermost edge of the base deck perpendicular to said length. Support for these features is found including in FIGS. 3-5, 7-8 and in the specification at page 10, lines 4-24 and page 17, lines 9-13. Note the following excerpts from the specification:

“For sake of comparison, the disc drive illustrated in FIGS. 3, 4 and 5-8 will be described in comparison to the 3½ inch half-high standard disc drive illustrated in FIGS. 1 and 2, but it is understood that the principles of the present invention *are applicable to other standard disc drive forms*, including 2½ inch and 5¼ inch drive forms and other heights, including low-profile.” (page 10, lines 4-8, emphasis added)

“Lip 115 provides a *minimum of 7.6 mm* on which to seat gasket 184 to seal the disc drive with cover 182. The prior art drive [of FIG. 1] provided a seat dimension of 2.5 mm at the minimum location which often resulted in the gasket mis-seating against the housing and cover so that the drive was not properly sealed and contaminants could enter the drive.” (page 17, lines 9-13, emphasis added)

Accordingly, the Applicant respectfully submits that claim 52 is sufficient definite and supported by the original written description to fully meet the requirements of §112. Moreover, the Applicant respectfully submits that the claimed subject matter is patentable over the art of record including Takatsuka. A review of this reference clearly shows that the same 5¼ base deck configuration is contemplated for all of the different sizes of discs used therein without modification, and Takatsuka is silent with regard to the claimed subject matter of new claim 52.

It is further believed that new claims 53-57 also meet the requirements of §112 and add additional limitations to claim 52 that are not taught or suggested by Takatsuka or the other art of record.

New independent claim 58 is generally directed to a 3.5 inch form factor data storage device that generally includes a base deck as described above, with an additional limitation that the recited shroud surface has a substantially constant radius. Support for this is found including in the specification at page 10, lines 16-17. Accordingly, claim 58, as well as dependent claims 59-62, also meet the requirements of §112 and are patentable over the art of record including Takatsuka.

New independent claim 63 is generally directed to a data storage device that generally comprises a base deck characterized as comprising a *base surface* which supports said spindle motor, a *disc shroud surface* which extends from the base surface substantially parallel with the disc axis at a substantially constant radius adjacent an outermost perimeter of the at least one data storage disc, and a *lip surface* which extends from the shroud surface to an outermost edge of the base deck. As before, these features are exemplified, but not limited by, the disclosed base deck 102 with base spindle support surface (not designated), disc axis 108, disc shroud surface 116, and lip surface 115.

Claim 63 further generally recites the lip surface as being is configured to compressingly engage the gasket seal, and wherein the lip surface has a *minimum extent of at least about 15%* of a line extending from the disc axis to the outermost edge of the base deck in a direction perpendicular to said outermost edge. As before, support is found including in FIGS. 3-5, 7-8 and in the specification at page 10, lines 4-24 and page 17, lines 9-13 (also see the excerpts to the specification noted above).

One skilled in the art would readily view the about 15% minimum extent recited in claim 63 as being explicitly or inherently disclosed by the original disclosure. For example, at page 10, lines 9-22, the present application generally discusses the use of non-standard sized 84 mm discs which are preferably centered at the disc axis 108 along the width (i.e., 50.8 mm from the respective edges 112, 114). The shroud surface 116 is preferably 43.2 mm from the axis, leaving 7.6 mm for the lip surface (see also page 17, lines 9-10). The ratio 7.6mm/50.8 mm equals 14.961 or about 15%, as set forth in the claim.

The Applicant notes that the 3½ form factor drive in FIG. 1 with a 95 mm disc is disclosed as providing only about 2.5 mm, resulting in a ratio of about 5% (4.921). Moreover, Takatsuka does not at least disclose a shroud surface as claimed, and is deficient as well with regard to the recited ratio.

As stated in the application, this larger lip advantageously provides benefits including improved sealing as compared to the prior art, a consideration for which Takatsuka and the other art of record appear to be silent. Accordingly, claim 63, as well as the claims depending therefrom, provide subject matter that fully meets §112 and is patentable over the art of record.

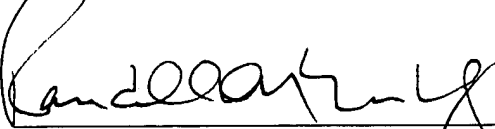
Conclusion

This along with the accompanying RCE is intended to be a complete response to the final Office Action mailed July 20, 2004. The Applicant respectfully requests examination and favorable action upon the pending claims 52-71. Should any questions

arise concerning this response, the Examiner is invited to contact the below signed attorney.

Respectfully submitted,

By:

A handwritten signature in black ink, appearing to read "Randall K. McCarthy", written over a horizontal line.

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